

Amendments to the Claims

This listing of claims, if entered, will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims

1. **(Currently Amended)** A method comprising:
determining a first specification for a first set of needed storage regions, wherein
the determining is performed in response to receiving a request to
perform an operation on a logical volume, wherein the logical
volume is created before the request to perform an operation is
received,
the first specification is based on an intent for the logical volume and
the operation,
the first set of needed storage regions is needed to perform **[[an]] the**
operation on **[[a]] the** logical volume, and
the first set of needed storage regions satisfies **[[an]] the** intent of the
logical volume, wherein the intent comprises an intended
configuration for implementing the logical volume, and a rule is a
portion of the intent associated with the logical volume;
searching a plurality of existing storage regions for a corresponding existing
storage region for each needed storage region in the first set of needed
storage regions; and
if no existing storage region is found corresponding to a first needed storage
region in the first set of needed storage regions, determining a second
specification for a second set of storage regions to be acquired, **wherein**
the second set of storage regions is needed to perform the operation on
the logical volume.
2. **(Previously Presented)** The method of claim 1 wherein the second set of
storage regions to be acquired comprises at least the first needed storage region.

3. (Previously Presented) The method of claim 2 wherein the second specification for the second set of storage regions to be acquired comprises an attribute of the first needed storage region, and a connection between the first needed storage region and a storage object in the logical volume.

4. (Previously Presented) The method of claim 1 further comprising:
using the second specification to acquire a third set of storage regions.

5. (Original) The method of claim 4 wherein
the third set of storage regions is a subset of the second set of storage regions.

6. (Previously Presented) The method of claim 1 further comprising:
acquiring the second set of storage regions; and
performing the operation on the logical volume using the second set of storage regions to be acquired.

7. (Previously Presented) The method of claim 1 wherein the second set of storage regions to be acquired satisfies the intent of the logical volume.

8. (Previously Presented) The method of claim 1 further comprising:
determining a third specification, wherein the determining the third specification comprises specifying an existing storage region of the plurality of existing storage regions to reserve for performing the operation.

9. (Previously Presented) The method of claim 1 wherein the second set of storage regions to be acquired excludes a second needed storage region for which an existing storage region of the plurality of existing storage regions is found.

10. (Previously Presented) The method of claim 1 wherein
the operation comprises increasing a size of the logical volume.

11. (Previously Presented) The method of claim 1 wherein

the operation comprises evacuating data from the logical volume.

12. (Previously Presented) The method of claim 1 wherein the operation comprises relocating data of the logical volume.

13. **(Currently Amended)** A system comprising:
first determining means for determining a first specification for a first set of needed storage regions, wherein
the determining is performed in response to receiving a request to perform an operation on a logical volume, wherein the logical volume is created before the request to perform an operation is received,
the first specification is based on an intent for the logical volume and the operation,
the first set of needed storage regions is needed to perform **[[am]] the** operation on **[[a]] the** logical volume, and
the first set of needed storage regions satisfies **[[an]] the** intent of the logical volume, wherein the intent comprises an intended configuration for implementing the logical volume, and a rule is a portion of the intent associated with the logical volume,
searching means for searching a plurality of existing storage regions for a corresponding existing storage region for each needed storage region in the first set of needed storage regions, and
second determining means for determining a second specification for a second set of storage regions to be acquired if no existing storage region is found corresponding to a first needed storage region in the first set of needed storage regions, **wherein**
the second set of storage regions is needed to perform the operation on the logical volume; and
a processor, coupled to control and configured to perform the functions of the first determining, searching and second determining means.

14. (Original) The system of claim 13 further comprising:
using means for using the second specification to acquire a third set of storage regions.

15. (Previously Presented) The system of claim 14 wherein the third set of storage regions is a subset of the second set of storage regions to be acquired.

16. (Previously Presented) The system of claim 13 further comprising:
acquiring means for acquiring the second set of storage regions to be acquired;
and
performing means for performing the operation on the logical volume using the second set of storage regions to be acquired.

17. (Previously Presented) The system of claim 13 further comprising:
third determining means for determining a third specification, wherein the determining the third specification comprises specifying an existing storage region of the plurality of existing storage regions to reserve for performing the operation.

18. (Currently Amended) A system comprising:
a first determining module configured to determine a first specification for a first set of needed storage regions, wherein
the determining is performed in response to receiving a request to perform an operation on a logical volume, wherein the logical volume is created before the request to perform an operation is received,
the first specification is based on an intent for the logical volume and the operation,
the first set of needed storage regions is needed to perform **[[an]] the** operation on **[[a]] the** logical volume, and
the first set of needed storage regions satisfies **[[an]] the** intent of the logical volume, wherein the intent comprises an intended

configuration for implementing the logical volume, and a rule is a portion of the intent associated with the logical volume,
a searching module configured to search a plurality of existing storage regions for a corresponding existing storage region for each needed storage region in the first set of storage regions, and
a second determining module configured to determine a second specification for a second set of storage regions to be acquired if no existing storage region is found corresponding to a first needed storage region in the first set of needed storage regions, wherein
the second set of storage regions is needed to perform the operation on the logical volume; and
a processor, coupled to control and configured to perform the functions of the stored modules.

19. (Previously Presented) The system of claim 18 wherein the second set of storage regions to be acquired comprises at least the first needed storage region.

20. (Previously Presented) The system of claim 18 wherein the second specification for the second set of storage regions to be acquired comprises an attribute of the first needed storage region, and a connection between the first needed storage region and a storage object in the logical volume.

21. (Previously Presented) The system of claim 18 further comprising:
an acquiring module configured to acquire the second set of storage regions to be acquired; and
a performing module configured to perform the operation on the logical volume using the second set of storage regions to be acquired.

22. (Previously Presented) The system of claim 18 further comprising:
a third determining module configured to determine a third specification, wherein the determining the third specification comprises specifying an existing

storage region of the plurality of existing storage regions to reserve for performing the operation.

23. (Previously Presented) A computer-readable storage medium, wherein the storage medium is not a signal, comprising:

first determining instructions configured to determine a first specification for a first set of needed storage regions, wherein

the determining is performed in response to receiving a request to perform an operation on a logical volume, wherein the logical volume is created before the request to perform an operation is received,

the first specification is based on an intent for the logical volume and the operation,

the first set of needed storage regions is needed to perform **[[an]] the** operation on **[[a]] the** logical volume, and

the first set of needed storage regions satisfies **[[an]] the** intent of the logical volume, wherein the intent comprises an intended configuration for implementing the logical volume, and a rule is a portion of the intent associated with the logical volume;

searching instructions configured to search a plurality of existing storage regions for a corresponding existing storage region for each needed storage region in the first set of needed storage regions; and

second determining instructions configured to determine a second specification for a second set of storage regions to be acquired if no existing storage region is found corresponding to a first needed storage region in the first set of needed storage regions, **wherein**

the second set of storage regions is needed to perform the operation on the logical volume.

24. (Previously Presented) The computer-readable storage medium of claim 23 wherein the second set of storage regions to be acquired comprises at least the first needed storage region.

25. (Previously Presented) The computer-readable storage medium of claim 23 wherein the second specification for the second set of storage regions to be acquired comprises

an attribute of the first needed storage region, and
a connection between the first needed storage region and a storage object in the logical volume.

26. (Previously Presented) The computer-readable storage medium of claim 23 further comprising:

acquiring instructions configured to acquire the second set of storage regions to be acquired; and
performing instructions configured to perform the operation on the logical volume using the second set of storage regions to be acquired.

27. (Previously Presented) The computer-readable storage medium of claim 23 further comprising:

third determining instructions configured to determine a third specification,
wherein the determining the third specification comprises specifying an existing storage region of the plurality of existing storage regions to reserve for performing the operation.

28. (Cancelled)